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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/521,372

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Kyoichi Sasaki

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12/14/2005

KNOBBE MARTENS OLSON & BEAR LLP

2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER

RAHLL, JERRY T

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/521,372	Applicant(s) SASAKI ET AL.	
	Examiner Jerry T. Rahll	Art Unit 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-11 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/28/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 28 April 2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

2. The drawings submitted have been reviewed and determined to facilitate understanding of the invention. The drawings are accepted as submitted.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,435,728 to Shimoji et al.
5. Regarding Claim 1, Shimoji et al. describes an optical fiber connection component (10) having a connection member (6) with through holes for optical fibers (12), guides (17) for rod-like coupling members (16), and a tuned square U-shaped plug (3) having a through-hole or inserting optical fibers (12) and a guide holes at the bottom of the concavity of the U-shape (see rear of 3 in Figures 2 and 4C), and wherein the connection member is arranged slidably in the

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plug by being installed in the concavity of the U-shape via the rod-like coupling member (see Figures 1A-4C and Columns 8-11).

6. Regarding Claim 2, Shimoji et al. describes the guide as a through hole (see Figures 2 and 4C).

7. Regarding Claim 3, Shimoji et al. describes the rod-like coupling member as cylindrical (see Figures 1A-4C).

8. Regarding Claim 4, Shimoji et al. describes two connection members arranged in the plug (see Figures 1A, 1C and 3).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 6-7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimoji et al. and further in view of US Patent No. 5,581,645 to Gehri.

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12. Regarding Claims 6 and 9, Shimoji et al. describes an optical fiber connection component (10) having a connection member (6) with through holes for optical fibers (12), guides (17) for rod-like coupling members (16), and a tuned square U-shaped plug (3) having a through-hole or inserting optical fibers (12) and a guide holes at the bottom of the concavity of the U-shape (see rear of 3 in Figures 2 and 4C), and wherein the connection member is arranged slidably in the plug by being installed in the concavity of the U-shape via the rod-like coupling member (see Figures 1A-4C and Columns 8-11). Further, Shimoji et al. describes bringing the through-holes of the connection members face-to-face (see Figures 1A-4C) and sliding the optical fibers in a direction of the center axis of the fibers along the rodlike coupling members (see Figures 1A-1C). Shimoji et al. does not specifically describe the optical fibers connected in the through hole of one connection member.

13. Gehri describes an optical fiber connection component (10) having a connection members (17) with through holes for optical fibers, and a plug (9b) having a through-hole (18b) or inserting optical fibers, and wherein the connection member is arranged slidably in the plug by being installed in the concavity plug (see Figures 3-4 and Columns 3-4). Further, Gehri et al. describes bringing the through-holes of the connection members face-to-face (see Figures 3-4) and sliding the optical fibers in a direction of the center axis of the fibers so that the optical fibers connected in the through hole of one connection member (see Figure 4).

14. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use the fiber biasing and positioning setup of Gehri with the connector device of Shimoji et al. The motivation for doing so would have been to reduce exposure of the fiber ends to the

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environment when not connected (see Gehri at Column 1 Lines 60-67). Therefore, it would have been obvious to combine Gehri with Shimoji et al. to obtain the invention as specified.

15. Regarding Claim 7, Shimoji et al. and Gehri do not specifically describe the use of adhesive to connect the connection members. However it is well-known to use adhesive on connectors. The motivation for using adhesive with the connector of Shimoji et al. and Gehri would have been to securely fasten the connection for long-term use and to keep external contaminants from interfering with the optical connection. Therefore, it would have been obvious to one of ordinary skill in the art to use adhesive with the connector assembly described by Shimoji et al. and Gehri. MC

16. Regarding Claim 10, Shimoji et al. and Gehri do not specifically describe the use of a refractive index matching agent for connecting the fibers. However it is well-known to use such refractive index matching agents with connectors. The motivation for using adhesive with the connector of Shimoji et al. and Gehri would have been to reduce optical losses at the interface between the fibers. Therefore, it would have been obvious to one of ordinary skill in the art to use refractive index matching agent with the connector assembly describes by Shimoji et al. and Gehri.

17. Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimoji et al. and Gehri as applied to claims 6 and 9 above, and further in view of US Patent No. 5,838,856 to Lee.

18. Shimoji et al. and Gehri describe a connection assembly, as discussed above. Shimoji et al. and Gehri do not specifically describe the fiber connection components fixed to an adapter.

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19. Lee describes an optical fiber connection assembly having connection units (110, 120) connected face-to-face with an adapter (130) (see Figures 3-6 and Columns 2-3).

20. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use the adapter of Lee with the connection assembly of Shimoji et al. and Gehri. The motivation for doing so would have been to ensure the optical connection (see Lee at Column 3 Lines 30-40).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry T. Rahll whose telephone number is (571) 272-2356. The examiner can normally be reached on M-Th (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jerry T Rahll


MICHELLE CONNELLY-CUSHWA
PRIMARY EXAMINER
12/12/05